

WORDTECH EXPERTISE

WordTech's pioneering expertise in dBASE technology allows us to bring the best desktop mapping tool to the database market. MapPlan is a must for dBASE users who want to graphically visualize their data.

In addition to the standard maps and demographic data included free with MapPlan, WordTech can also provide you with additional custom maps and other demographic data. Please contact WordTech with your specific requirements.

THE BEST SUPPORT

PHONE SUPPORT

Each WordTech product comes with 1 hour of FREE phone support. Our tech support people have years of experience. No busy signal; WordTech Voice-Mail assures a prompt Tech Support call back if phones are busy when you call.

WORDTECH AND COMPUSERVE BULLETIN BOARDS

On WordTech's BBS, registered users will find user tips, bug bulletins, update news, conference and user group announcements, a Tech Support staff mailbox and much more. WordTech's public forum on CompuServe offers local modem access and an open meeting place to communicate with both WordTech users and the broader community of software users and developers.

DEVELOPER AND TRAINER NETWORK

To better meet the needs of both business users and developers, WordTech constantly adds to its nation-wide list of trainers and application developers.

DEVELOPER CONFERENCES

WordTech developer conferences assist developers to get the most out of new and existing WordTech products; ask questions, get answers, exchange tips, provide feedback.

UPDATES AND UPDATES

WordTech's development staff insures a steady stream of cost-effective updates and new products. These will be offered to our registered users at very competitive prices.

WORDTECH NOTES

This full-color, fun and useful disk-based publication brings you the latest news from inside WordTech as well as from some of WordTech's most expert and innovative users.

SYSTEM REQUIREMENTS

DOS Version: PC compatible computer, DOS 2.1 or higher, 640K RAM, 4MB hard disk space, EGA, VGA, Hercules monitor, mouse.

Windows Version: MS Windows 3.0 or higher, 2MB RAM, 4MB hard disk space, VGA monitor, mouse.

ARAGO™

MapPlan™

Mapping for dBASE®

WordTech Systems is a leading supplier of fully dBASE language compatible, data compatible database management systems and information tools. WordTech provides a complete dBASE application development environment including interpreters, distribution compilers and networking systems for the dBASE language. WordTech's database products provide migration paths to UNIX® and SQL environments. The company's information tools are designed to allow end users to easily interpret dBASE data for decision making purposes. These tools include the only desktop mapping software for dBASE, leading expert systems software for microcomputers, and an object-based presentation graphics package.

WORDTECH

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* All product and technical specifications herein are subject to change without notice.

Trademarks:

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SEE YOUR DATA

MapPlan lets you graphically visualize your dBASE data. It is the only desktop mapping product that uses data in native data base file DBF format. You can use MapPlan to understand your geographic data far better than ever before.

MapPlan links your database file to a map and graphically displays your data in relation to location or region. This helps you visually understand your data, analyze trends, spot opportunities, and see geographic relationships between various data elements.

You can relate your individual data to general demographic information through MapPlan. This helps you identify target markets, evaluate your performance relative to market potential, locate prospects, manage sales territories, specify new sites, or just plain have fun!



MAPS THAT INFORM

MapPlan lets you select a map (four U.S. maps and one world map are included free) and then attach data to it. This data can reside in any DBF file. All you need to do is specify the link field that merges the map with the data. Specify one or more data fields and your information is visually displayed immediately. The dBASE data does not have to be copied, manipulated or reformatted.

MapPlan supports five standard map types: color, pie, bar, pushpin and crosstab. These can be used for a variety of purposes. For example, a sales executive can use a color map to display gross sales figures for each region (state, country, zip code, etc.) or use a bar map to compare sales figures for each quarter for each region.

MapPlan supports multiple map layers which greatly facilitate users in performing spatial marketing and demographic analysis. You can either view individual map layers or view these layers simultaneously in any combination.

EASY TO USE

MapPlan has a modern CUA (Common User Access) compliant user interface with pull-down menus and dialog boxes. The interface is intuitive and provides full mouse support. Context sensitive Help is available at all times and a dialog box shows the current status of files at the touch of a button.

MapPlan data can be browsed, queried, and edited as needed. You can create histograms and scatter charts to easily analyze the data.

MapPlan provides free demographic data in several DBF files. This data can be displayed, compared with your specific data, and used for analysis purposes.

COMPLETE FLEXIBILITY

MapPlan provides complete flexibility in choosing display options. You can specify new colors, fonts, symbols and more. Maps can be panned, zoomed, positioned, and regions selected. Objects on the screen can be moved, resized, and their attributes easily changed. You can also specify default preferences and save these for future use.

MapPlan offers full annotation capabilities. Text can be placed anywhere on a map using eight fonts up to 99 points in size. The text can be rotated 360 degrees. Lines, circles, and symbols can also be placed anywhere on the map. You can measure distances on the map in miles, kilometers, yards, meters, or feet. To measure distances on a map, simply turn on the line or circle odometer and measure any distance.

IMPORTING AND EXPORTING MAPS

In addition to the five maps included with MapPlan, you can also import maps created in other programs in the Urban Atlas, DLG or DXF formats; using a conversion program available separately. You can export any map display to a Computer Graphics Metafile (CGM) format file.

GIS FOR dBASE

MapPlan has all the features you expect in a Geographic Information System (GIS), but without their cost and complexity. It has been specifically designed to provide powerful desktop mapping of dBASE data at an affordable price. When a dBASE file is selected its field names automatically "pop-up" when you need to make a field selection.

Each area on the map can be easily queried and the corresponding database record displayed. Conversely, the database can be queried and the results displayed on a map. For example, a query may ask to show all zip codes with over 50 customers "and" for which sales are less than \$30,000. MapPlan then identifies qualifying zip code areas.

With MapPlan you can see your company's data on any appropriate map and determine, for example, where are your customers?; where are the largest customers?; where are your offices and vendors?; where are your products being sold?; where are your sales conforming to the potential market? etc. There are virtually no limits to the ways you can study your data with MapPlan.



EMPIRE PRODUCTS INC.

PRINTER SUPPORT

MapPlan supports over 200 output devices at their highest resolution. You can print any map in black-and-white on laser printers or in color on ink jet printers, plotters, and dot matrix printers. MapPlan supports both HP PaintJet and HP DeskJet.

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USER GROUP SUPPORT

WordTech believes that user groups offer you one of the most effective ways to tap into WordTech products' technical capabilities. WordTech offers significant resources in direct support of existing and new user groups and WordTech Special Interest Groups (SIG's).

UPDATES

Arago's completely re-designed internal architecture insures a steady stream of cost-effective updates and new products. These will be offered to our registered users at, as always, very competitive prices.

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Recommended: 2 MB EMS, mouse, EGA display.

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016-005-100



"The Best dBASE®."

- dBASE IV® compatible
- Stunningly Fast
- Elegant User Interface
- Advanced Report Writer
- Automatic Code Generator
- Test Coverage Analyzer
- Stand-alone .EXE compiler

WORDTECH



ARAGO is the most advanced dBASE IV® compatible database family
It consists of three separate products:

ARAGO dBXL - dBASE IV® and dBASE III Plus™ compatible interactive database management system. Multi-user version is called ARAGO dBXL/LAN. Arago's completely new internal software architecture provides unsurpassed speed in a fully dBASE compatible database system.

Arago dBXL delivers an unmatched array of productivity features. For maximum accessibility, Arago dBXL complies with IBM's Common User Access (CUA) standard. Arago dBXL includes hundreds of new language extensions, a report writer, a panel painter, an application generator, business graphics, EMS support, smart HELP with an on-line manual, improved relational ability, and more.

ARAGO QUICKSILVER - Fully compatible .EXE compiler that does not require payment of any distribution royalties. It provides the perfect complement to dBXL. This dBASE IV and dBASE III PLUS compatible compiler completes the Arago application development system.

The resulting executable (.EXE) files can be distributed without per copy licensing fees. "C" and assembly routines are directly linkable. Arago Quicksilver's automatic overlay system frees programmers from the burdensome task of memory management design, further increasing programmer productivity. Arago Quicksilver also includes its own dynamic overlay linker.

ARAGO PROFESSIONAL - An integrated development environment that includes multi-user versions of both Arago dBXL and Arago Quicksilver. Arago Professional is the complete package for serious developers.

The ARAGO software family provides hundreds of new commands, functions and technical innovations.
There is no doubt, whether you are a first-time database user or an advanced developer -
ARAGO is the best dBASE!

Since 1984, WordTech has been a leading supplier of dBASE compatible software technology. The company pioneered the development of dBASE compilers, sophisticated commands and functions, and a greatly improved user interface. WordTech has lead the market in bringing LAN, SQL, and UNIX capabilities to the database environment. With the introduction of the Arago product family, WordTech now brings outstanding speed, dBASE IV compatibility, and CUA compliance to its users.

ARAGO dBXL

...the fastest dBASE® compatible dbms!

Arago dBXL is the fastest dBASE IV* and dBASE III PLUS™ compatible database management system available. Speed and technical sophistication combine to make Arago the most productive and complete database product family. Arago dBXL supports both interactive database users and advanced developers with an intuitive user interface and broad command selections. Beginner to expert, start to finish, Arago flexibly matches each user's level of expertise.

Unsurpassed Speed: Benchmarked against Ashton-Tate's dBASE IV and Fox Software's FoxPro™, Arago dBXL beat them both to the finish line in a test suite which included a representative mix of frequently used database functions and operations.

dBASE IV™ and dBASE III PLUS™ compatibility: data, index, report, format, program and other files are fully interchangeable.

Arago's on-line HELP system is only a keystroke away and is now cross-referenced for database on-line effectiveness.

Arago dBXL allows users to easily start with INTRO. INTRO's intuitively accessible menu system lets the new user define or select databases, edit files, delete data, perform look-up's, generate reports and labels, perform relational operations, and much more.

Point and click with a mouse or use your keyboard. Both Arago dBXL and its applications offer mouse support.

Arago's user interface shortens the learning curve by conforming to IBM's Common User Access (CUA) interface standard. All menus, data entry screens and other interface elements work in a consistent way, similar to other CUA-compliant systems such as Microsoft Windows™.

Developers may also create their own CUA-compliant applications.

Arago's command set includes single commands for coding control panels, dialog boxes, radio buttons, mouse support, special support for EGA/VGA displays and more.

The award-winning WordTech R&R Relational Report Writer® is part of Arago dBXL. R&R generates professional, easy-to-read, band-oriented reports.

Arago's ground-breaking non-intrusive Test Coverage Analyzer (TCA) flags untested portions of your code. Now you can confirm and document that your code has been thoroughly tested.

WordTech's SmartCode™ application generator automatically generates application code using easy-to-modify templates.

Business graphics are included in Arago dBXL covering pie, bar, line and scatter charts. You may also display images from other sources, such as video still images and other high resolution bit-mapped graphics.

In all, 300+ new commands, functions, and technical innovations are part of Arago; making it 'The best dBASE.'

ARAGO

MEET TOMORROW'S
ADVANCED

NEW AND SUPERIOR
COMMANDS

Arago extends the dBASIC language to enhance developer productivity. New language extensions include: extended arithmetic, enable development of sophisticated user HELP files, and verification.

MODULAR ARCHITECTURE

Arago's completely new architecture has been explicitly designed for the modern operating environment of LAN, SQL, UNIX, and OS/2. WordTech's Arago products meet the needs of users' needs.

PRESERVE YOUR INVESTMENT IN dBASE LANGUAGE PROGRAMS AND DATA

FILE COMPATIBILITY

WordTech leads the industry in dBASIC file compatibility including data, program, report, format and other files. The Arago database family can also simultaneously address dBASIC IV and dBASIC III PLUS memo fields.

COMMAND COMPATIBILITY

Your existing dBASIC IV and dBASIC III PLUS applications can be run using Arago dBXL. Or you can compile Arago dBXL, dBASIC IV or dBASIC III PLUS code for distribution using the Arago Quicksilver compiler.

LEARNING

Because Arago adheres to the dBASIC language standard, dBASIC users can start immediately with Arago. Later, they can learn Arago's command and function extensions.

ARAGO ACCELERATES THE DEVELOPMENT CYCLE

ARAGO dBXL'S ENHANCED DEFAULT PROGRAM EDITOR INCLUDES such word processing functions as block write, block print, block move, string search-and-replace, unlimited file sizes, mouse-supported scrolling and CUA-compliance.

FOR SPELLING AND SYNTAX ERRORS, THE FIX OPTION: Whenever Arago dBXL encounters syntax and spelling errors (while compiling or running a program) it will display the command line which produced the error, and offers you the FIX option. If you choose it, Arago dBXL will automatically invoke its default program editor, open the file containing the line, and position the cursor at the line containing the error. After you have corrected the error and saved your change, Arago dBXL will resume execution without forcing you to restart at the beginning of the program. The FIX option can save you many hours of debugging drudgery.

FOR LOGIC ERROR DETECTION, Arago's syntax debugger "Codebrowse" window lets you view each line of source code as it executes, while a debug window lets you monitor memory variables and set multiple conditional break points. On a 50-line VGA monitor, you may open the debugger window below your normal application display window.

INTEGRATED HELP UTILITIES in Arago dBXL facilitate database systems development. For example, you can obtain a listing of the structure of any currently open database on demand. You may then pick a field name to import into a command line or to form an expression. You may also obtain a listing of any active memory variables, or a dynamic, context-sensitive list of keystroke commands.

THE "INNOVATIVE" TEST COVERAGE ANALYZER (TCA): One of the most effective ways to minimize development costs is to detect and correct bugs early in the development process. EDP development studies have shown that the cost of fixing an error increases dramatically, the later in the development cycle the error is detected. A true breakthrough in test-phase productivity, Arago's TCA offers a cost-effective way to significantly reduce bug fixing costs in the dBASIC environment by flagging un-executed logical blocks of program code, "where bugs hide", without altering the code. The TCA also records the number of times each block of code has been executed.

Benefits

HOW'S NEEDS WITH TECHNOLOGY

FEATURES, FUNCTIONS AND

SE command and function set and user productivity. Arago's include many commands which CUA-compliant applications, facilities and data

TURE TO SUPPORT DOS, LAN,

internal architecture has to support a variety of. As new standards emerge in other environments, product family will evolve to meet

ENHANCE YOUR PRODUCTIVITY

INTERACTIVE DATABASE USERS

The Arago database family offers advanced HELP, easy-to-use CUA-compliant interface, an intuitively accessible "INTRO" menu, a high-quality report writer and many other features which correctly place the workload on the software, not on the user.

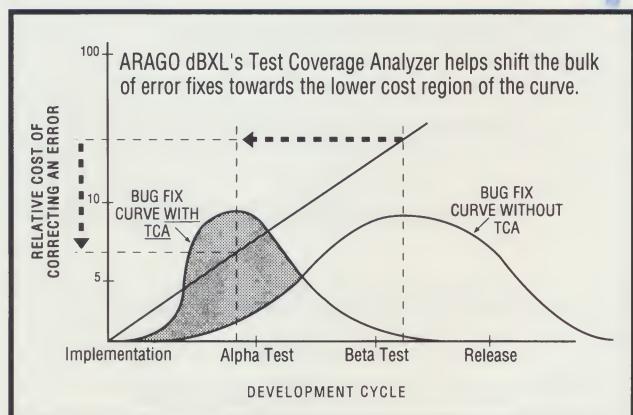
DEVELOPER/PROGRAMMERS

Arago emphasizes developer productivity by providing a complete and perfectly matched development environment, stunning speed, optimal tools for cost-effective development of CUA-compliant applications, automatic memory management, the first-ever PC-based Test Coverage Analyzer, a screen painter, an application generator, and a report writer/code generator.

MANAGEMENT

dBASE compatibility, high programmer productivity, CUA-compliant applications and the ability to migrate to other operating environments over time, add up to a system that's up and running, delivering timely, accurate database management solutions.

ARAGO IMPROVES THE QUALITY OF YOUR APPLICATION



By using the TCA, developers can systematically shift the bulk of bug detection and correction towards the beginning of the development cycle, when the cost of fixing an error is less than one tenth of what it is once a program has been released. The TCA can also be used to provide managers and clients with documentary proof of test-coverage completeness as a basis for releasing applications for widespread commercial use.

ARAGO Quicksilver

...the only dBASE IV compatible .EXE compiler!

For maximum speed and source code security, Arago Quicksilver offers the application developer the best available dBASE IV compatible ".EXE" compiler. In addition to tamper-proof distribution of turn-key applications, Arago Quicksilver provides developers with a free-standing, no per copy licensing fee alternative for distributed applications. Arago Quicksilver's automatic overlay management feature now uses even more sophisticated memory management techniques, improved parameter passing, and is linkable with both assembler and popular "C" compiler routines.

Arago Quicksilver compiles both Arago dBXL and earlier dBXL program code versions as well as dBASE IV and dBASE III PLUS compatible code.

Arago Quicksilver is matched perfectly with Arago dBXL to compile Arago dBXL's code for distribution, including CUA-compliant applications

"C" routines can be accessed and overlayed to remove them from the memory footprint.

Arago Quicksilver performs automatic management of overlays, even at the .OBJ level. Arago boasts improved speed and capability in overlay handling which makes the most of all available memory.

Dynamic linker: Arago's advanced dynamic overlay manager reduces memory overhead and speeds up overlay access. The Arago Quicksilver linker is easily the most advanced in the dBASE compatible environment.

Arago Quicksilver includes the WordTech R&R Code Generator which generates dBASE code for inclusion with compiled applications.

The Clipper-compatible "Extor" and "Extend" C language interface is now included making it easy to link in third party Clipper libraries.

Full Expanded Memory Support (EMS) is provided in Arago.

ARAGO'S SYSTEM CAPACITIES ARE BETTER THAN OTHER DATABASE MANAGEMENT SYSTEMS

SYSTEM CAPACITIES	ARAGO	dBASE IV	FoxPro
Max fields per file	512	255	255
Work Areas	30	10	25
Max array dimensions	256	2	2
Max array elements	64,000	1,023	3,600
Max memory variables	64,000	1,500	3,600
Max editor file size	No limit	32k	No limit
PACK disk requirements	100%	100%	200%
Max string size	64k	256k	64k
Max memo field size	No limit	64K	No limit
Earliest date	4713 BC	0000	1582AD
Command line length	1024 bytes	1024 bytes	1024 bytes

Arago meets international standards. The Arago family supports international character sets, sort orders, currency, date, decimal, and separator formats. Syntax additions to facilitate the development of applications in one country for use in a different country are also supported. Provisions have been made for dynamic window and text sizing to accommodate international text translations.